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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|-----------------------------------|------------------|
| 10/717,931 | 11/21/2003 | Jong Ho Kim | 9988.077.00-US | 7547 |
| 30827 7590 12/20/2006 MCKENNA LONG & ALDRIDGE LLP 1900 K STREET, NW WASHINGTON, DC 20006 | | | EXAMINER RIGGLEMAN, JASON PAUL | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 1746 | |
| SHORTENED STATUTORY PERIOD OF RESPONSE | | MAIL DATE | DELIVERY MODE | |
| 3 MONTHS | | 12/20/2006 | PAPER | |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/717,931

Applicant(s)

KIM ET AL.

Examiner

Jason P. Riggelman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 November 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 6/24/2005.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

DETAILED ACTION

Drawings

1. Figures 1-2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:

- (1) if a machine or apparatus, its organization and operation;
- (2) if an article, its method of making;
- (3) if a chemical compound, its identity and use;
- (4) if a mixture, its ingredients;
- (5) if a process, the steps.

Extensive mechanical and design details of apparatus should not be given.

3. The abstract of the disclosure is objected to because the length exceeds the 150-word maximum. Correction is required. See MPEP § 608.01(b).
4. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
6. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear how the method is provided with a door, especially.
7. The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.
8. Regarding claim 1, the phrase "opened/closed" renders the claim(s) indefinite thereby rendering the scope of the claim(s) unascertainable.
9. Claim 1 recites the limitation "the" in "most recently sensed wet laundry amount". There is insufficient antecedent basis for this limitation in the claim.
10. Claims 3-4 recites the limitation "an" in "abnormal". It is unclear if this is the same as the "abnormal" recited in claim 1.

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11. The term "abnormal" in claims 1 and 3-4 and "predetermined" in claims 3-6 are relative terms which renders the claims indefinite. The term "abnormal" and "predetermined" are not defined by the claims, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. For purposes of examination, the term "abnormal" is assumed to be any opening of the door during the washing cycle since washing machines conventionally perform the washing cycle with the door closed.
12. Claim 5 recites the limitation "the" in "end" and "predetermined point". There is insufficient antecedent basis for this limitation in the claim.
13. Claim 6 recites the limitation "said" in "wash cycle resetting step". There is insufficient antecedent basis for this limitation in the claim.
14. Claim 5 recites the limitation "the" in "predetermined time period". There is insufficient antecedent basis for this limitation in the claim.
15. Claim 6 recites the limitation "said" in "wash cycle resetting step". There is insufficient antecedent basis for this limitation in the claim.
16. The term "most recently" in claim 1 is a relative term which renders the claim indefinite. The term "most recently" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. For purposes of examination, "most recently" is assumed to be either the first wet laundry amount or second wet laundry amount.

Claim Rejections - 35 USC § 102

17. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

18. Claims 1-7 are rejected under 35 U.S.C. 102(b) as being unpatentable by Harwood et al. (US Patent No. 5768728).

19. Harwood et al. teaches a laundry washing machine with a door and a method for controlling the washing based on a sensed laundry amount. The method senses an initial dry laundry amount after initiating a wash cycle, senses a second wet laundry amount upon detection of an abnormal open state of the door during the wash cycle (Column 9, Lines 25-40), and controls the wash course based on the sensed second wet laundry amount. The opening of the door (lid) during the wash cycle is sensed and repeats the determination of the laundry amount (Column 9, Lines 25-40). The first wet laundry amount-sensing step is repeated (after 1 minute duration, for example) to uniformly distribute clothes (Column 9, Lines 3-13) and verify determination hence providing more accuracy (Column 9, Line 60). The wash cycle is reset if the abnormal open state of the door occurs before a predetermined point of the wash cycle --- the end of the wash cycle. The wash cycle is divided into three predetermined time intervals – the “sense agitate”, the “mix-up agitate”, and the “true agitate” intervals (Column 9, Lines 0-65). The laundry washing machine constantly monitors the laundry load amount and can sense an abnormal open state of the door at any point in the washing

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cycle; therefore, it senses an abnormal open stat of the door during a predetermined sensing point.

Conclusion

20. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Won (US Patent No. 5987679), Thuruta et al. (US Patent No. 4779430), Moon (US Patent No. 5671493). All of these, in addition to the ASA, Admitted State of the Art, provided by the applicant in the IDS, Information Disclosure Statement, teach a washing machine method for sensing a laundry amount at various periods in the washing cycle. There are additional examples of art not listed that are relevant to the claims as written.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason P. Riggelman whose telephone number is 571-272-5935. The examiner can normally be reached on M-F, 8:30-5:00.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached on 571-272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jason P Riggleman
Examiner
Art Unit 1746

JPR



MICHAEL BARR
SUPERVISORY PATENT EXAMINER